CLAIMS

What is claimed is:

1. A method for mounting an air circulation component to an air circulation system, wherein the air circulation component comprises a center of gravity, comprising:

(a) providing a notch associated with an air circulation component, wherein the notch comprises a contact surface;

(b) providing a guide associated with the air circulation system, wherein the guide comprises a load bearing surface; and

(c) positioning the air circulation component with respect to the air circulation system such that a portion of the contact surface is adjacent to a portion of the load bearing surface,

wherein the adjacent surfaces comprise a contact angle that is substantially coplanar with a center of gravity of the air circulation component, and

wherein a portion of the weight of the air circulation component transferred between the surfaces causes a sealing pressure against a portion of the air circulation system.

2. The method of claim 1, wherein the air circulation component comprises at least one of the following: a filter, and a filter containing filtration media.

3. The method of claim 2, wherein the air circulation system is a filtration system.

4. The method of claim 2, wherein the sealing pressure against a portion of the air circulation system comprises substantial contact between a trailing edge of the filter and an adjacent structural bracket associated with the filtration system.

5. The method of claim 1, wherein the guide comprises a microbump adapted to be in substantial contact with a portion of the contact surface.

6. The method of claim 1, wherein the notch comprises a microbump adapted to be in substantial contact with a portion of the load bearing surface.

7. The method of claim 1, further comprising:

providing a seal between a portion of the air circulation component and a portion of the air circulation system.

8. The method of claim 7, wherein the seal is at least one of the following: a pile seal, and a brush seal.

9. The method of claim 1, further comprising:

providing a gripping device associated with the air circulation component.

10. The method of claim 9, wherein the gripping device comprises at least one of the following: at least one hole in the air circulation component, and an extension from the air circulation component.

11. The method of claim 1, wherein the air circulation component comprises at least one of the following: a structural bracket adjacent to a structural component of an air circulation system, a structural component of the air circulation system, a non-structural component of the air circulation system.

12. An apparatus for mounting to an air circulation system, the system comprising a guide having a load bearing surface, the apparatus comprising:

(a) a housing; and

(b) a notch associated with the housing,

wherein the notch comprises a contact surface for mounting adjacent to the load bearing surface,

wherein the adjacent surfaces comprises a contact angle that is substantially coplanar with a center of gravity of the housing, and

wherein a portion of the weight of the housing transfers between the surfaces, and causes a sealing pressure against a portion of the air circulation system.

13. The apparatus of claim 12, wherein the housing comprises at least one of the following: a filter, and a filter containing filtration media.

14. The apparatus of claim 13, wherein the air circulation system is a filtration system.

15. The apparatus of claim 13, wherein the sealing pressure against a portion of the air circulation system comprises substantial contact between a trailing edge of the filter and an adjacent structural bracket associated with the filtration system.

16. The apparatus of claim 12, wherein the notch comprises a microbump adapted to be in substantial contact with a portion of the load bearing surface.

17. The apparatus of claim 12, further comprising:

a seal between a portion of the housing and a portion of the air circulation system.

18. The apparatus of claim 17, wherein the seal is at least one of the following: a pile seal, and a brush seal.

19. The apparatus of claim 12, further comprising:

a gripping device associated with the housing.

20. The apparatus of claim 19, wherein the gripping device comprises at least one of the following: at least one hole in the housing, and an extension from the housing.

21. The apparatus of claim 12, wherein the air circulation system comprises at least one of the following: a structural bracket adjacent to a structural component of a air circulation system, a structural component of the air circulation system, a non-structural component of the air circulation system.

22. A method for reducing air leakage from a filtration system comprising a structural bracket and a guide with a load bearing surface, the method comprising:

(a) providing a notch associated with a filter, wherein the notch comprises a contact surface;

(b) positioning the filter with respect to the guide and structural bracket such that a portion of the contact surface is adjacent to a portion of the load bearing surface,

wherein the adjacent surfaces comprise a contact angle that is substantially coplanar with a center of gravity of the air circulation component, and

wherein a portion of the weight of the air circulation component transferred between the surfaces causes the filter to generate a sealing pressure against an adjacent structural bracket associated with the filtration system.

23. The method of claim 22, wherein the notch comprises a microbump adapted to be in substantial contact with a portion of the load bearing surface.

24. The method of claim 22, further comprising:

providing a seal between a portion of the filter and a portion of the structural bracket.

25. The method of claim 24, wherein the seal is at least one of the following: a pile seal, and a brush seal.

26. The method of claim 22, further comprising:

providing a gripping device associated with the filter.

27. The method of claim 26, wherein the gripping device comprises at least one of the following: at least one hole in the filter, and an extension from the filter.